

REMARKS

Claims 1-30 are pending and under consideration. Reconsideration is requested.

Items 4-5: Allowable Subject Matter

In items 4-5 of the current Office Action, the Examiner indicates that claims 12-15 and 24-27 are allowed. (Action at page 5). Applicants thank the Examiner for the indication of allowable subject matter.

Item 3: Rejection of claims 1-11,16-23 and 28-30 under 35 U.S.C. §103(a)

In item 3 of the Office Action, the Examiner rejects claims 1-11, 16-23, and 28-30 under 35 U.S.C. §103(a) as being unpatentable over Hum et al. (U.S.P. 6,714,133) in view of Sutton et al. (U.S. 6,915,112). (Action at pages 2-4). The rejection is traversed.

Independent claim 1, for example, recites an input system including "an information generation part generating input information based on a given input operation; a transmission part substantially simultaneously transmitting a first signal and a second signal through a wave direction unit, the first signal and the second signal being generated by having a plurality of different carrier frequencies modulated with the same input information; and a reception part receiving the transmitted signals and demodulating the signals into the same input information." Independent claims 16 and 30 have similar recitations.

That is, as recited in independent claim 1, for example, the "same input information" is generated "based on a given input operation." This same information is then transmitted simultaneously by two signals on different carrier frequencies. Applicants submit that these features are not taught by even an *arguendo* combination of the art relied on by the Examiner.

In item 6 of the current Office Action, entitled Response to Arguments, the Examiner concedes that Hum does not disclose:

the transmission part simultaneous a first and a second signals, with the same input.

(Action at page 6, lines 8-9).

However, the Examiner asserts that Sutton teaches "simultaneously transmitting a first signal and a second signal with the same input" by citing Sutton's disclosure regarding:

multiple radios in the same device, the both radios can be used simultaneously, they maybe able to receive or send signals at the same time . . . it would have been obvious . . . to implement the transmitting system having a first and a second signals are transmitted simultaneously from the same antenna as taught by Sutton et al. into the information generation part generating input information based on a given input operation of Hum et al. . . . because this would provide

both radios can be used simultaneously, for instance both radios may be to receive at the same time, both radios may be able to send at the same time.

(Action at page 6, lines 10-21).

As set forth in USPTO Examination Guidelines for Determining Obviousness Under 35 U.S.C. §103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (*KSR*) effective October 10, 2007[Federal Register: October 10, 2007 (Volume 72, Number 195)][Notices][Page 57526-57535]. ("Examination Guidelines"):

As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. §103 is stated in *Graham v. John Deere Co.* Obviousness is a question of law based on underlying factual inquiries. . . . (2) Ascertaining the differences between the claimed invention and the prior art; and (3) Resolving the level of ordinary skill in the pertinent art.

(See, Examination Guidelines, page 57527, col. 1).

That is, even in view of *KSR*, the claimed invention may not be dissected into discrete elements to be analyzed in isolation, but must be considered as a whole. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983); *Jones v. Hardy*, 727 F.2d 1524, 1530, 220 USPQ 1021, 1026 (Fed. Cir. 1983) ("treating the advantage as the invention disregards the statutory requirement that the invention be viewed 'as a whole'").

As set forth by the Federal Circuit in citing *KSR* indicated that "the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not." *Leapfrog Ent., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1161, 1161, 82 USPQ2d 1687, 1690-91 (Fed. Cir. 2007) (citing *KSR*, 127 S.Ct. 1727, 1739, 82 USPQ2d 1385, 1395 (2007)).

Applicants submit the Examiner's assertions are in error since one of ordinary skill in the art could not have combined the claimed elements by known methods in a manner as suggested by the Examiner, and the elements in combination do not merely perform the function that each element performs separately and that the Examiner has not satisfied the Graham factors.

By contrast, Sutton merely discloses;

FIG. 6 illustrates . . . isolating multiple radios in the same device or on the same chip.

(see, for example, col. 7, lines 15-17)

However, signals from these multiple radios as disclosed by Sutton are combined, e.g.,:

Coupler and splitter 640 combines signals from the transmitters and provides the transmitted signal to the antenna 670.

(emphasis added, see, for example, col. 8, lines 1-5).

That is, the Examiner is in error in asserting that Sutton discloses "simultaneously transmitting" two separate signals, that is, "a first signal and a second signal with the same input," as recited by claim 1, for example.

Further, Applicants respectfully submit that the Examiner is in error in his assertions regarding the proposed modification of Hum. By contrast, Hum discloses:

The goal . . . to have all of the transponders in the system respond. . . can report how many and what types of transponders are available. . . interrogation signals using frequency X_1 may be transmitted to all or a certain configuration of coupling ports at time t_1 , then interrogation signals using frequency X_2 may be transmitted to all or a certain configuration of coupling ports at time t_2 , and so forth. . . each transponder within range of the interrogator 12 or a coupling port 16a to 16n would respond when it senses a predetermined frequency signal. When multiple transponders of the same type are in a range of one or more coupling ports, they will respond by way of anti-collision protocols. Each transponder is identified by a distinct identification signal or ID code that it transmits to the interrogator according to an anti-collision protocol that may give priority to certain identification signals or ID codes in relation to others. . . goal of the location mode is to locate where all of the transponders are in the system. The components may be transmitted in a predetermined and/or sequential manner. Each of the components of the signal is carried on all of the communication lines 14a to 14n in an arbitrary pattern and transmitted from all or an arbitrary number of the coupling coils, but is intended to communicate with only one of the transponders, say transponder 18a. Consequently, when the coupling port 16a broadcasts the interrogation signal 17a one of the components of the signal will be intended for transponder 18a. The signal will cause the transponder to initialize and send an identification signal or ID code and/or data back to the interrogator through the coupling port 16a and communication line 14a. . . in the locating mode the interrogator may use different RF modulation modes in a sequential or predetermined manner, and each type of transponder is configured to respond to a particular one of the frequencies no matter where in the system it is located.

(emphasis added, see, for example, col. 5, lines 5-55).

That is, Hum discloses a system in which the disclosed goal is to locate and identify various transponders. Hum accomplishes this goal, in part by disclosing a detailed methodology for transmitting a particular frequency at a certain time and in a "sequential order."

Applicants respectfully submit that the Examiner's assertions in support of the rejection have not satisfied the requirement of "the common sense of those skilled in the art demonstrates why some combinations would have been obvious."

Rather, Applicants submit that it would have not been obvious to one of ordinary skill in the art to combine or substitute multiple radios as disclosed by Sutton into a system as taught by Hum and have Hum's system transmit a same input signal on different frequencies. Since in doing so, i.e., modifying Hum as set forth by the Examiner, detracts from Hum's stated goals and methodology to locate and identify transponders. That is, the modification of Hum in a manner

suggested by the Examiner would not have been reasonable to one of ordinary skill in the art.

Summary

Since features recited by independent claims 1, 16, and 30 (and dependent claims 2-11, 17-23, and 28-29) are not taught by even an *arguendo* combination of the art relied on by the Examiner in support of the rejection and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 1-11, 16-23, and 28-30 allowed.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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